HYUNDAI

Display Solutions by Expertise

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Digital Display Solutions

2009

Display Solutions by Expertise.

HYUNDAI

Display Solutions by Expertise

Since the mid-90s, the name HYUNDAI has been synonymous with the design and production of state-of-the-art display technologies. Advanced devices offering sophisticated design and supreme image quality – with "built-in" future-proofing.

On the one hand the ongoing process of digitalization leads continuously to new fields of operation for digital displays. On the other hand the technical progress enables new capabilities in development and production. Being an expert for display solutions HYUNDAI IT with it's products brings both together: new requirements from the market and the new technical prospects from production side. As a result there are innovative display solutions which will revolutionize the display market with state-of-the-art technology, new functions and new designs.

Join us on a voyage of discovery, and explore today what display solutions will be like tomorrow.
HYUNDAI IT : The name of choice for a broad range of future-oriented applications. The technology of tomorrow, for today's trend and quality conscious customers. Welcome to the future. Welcome to HYUNDAI IT.

Indoor & Outdoor Public Displays

More and more large-sized digital LCD screens are replacing existing analogue display media for the presentation of information and advertising messages. Combined with a professional "Content Management Software" and attractively created content these "Digital Signage Systems" are launching to the next generation of public display devices. By using special "Out-Of-Home" LCD panels HYUNDAI IT's indoor and outdoor pubic displays ensure the presentation of digital signage contents in a pin sharp, high bright and brilliant picture quality. Meeting all necessary technical requirements for professional display equipment these enhanced displays ensure a reliable and failure-free operation in any kind of indoor or outdoor environment. Providing an integrated video wall function as well as the options for touch screen functionality and tempered glass surface the HYUNDAI IT DID's are the most flexible and versatile visual interface for all kind of digital signage solution.

Touch Screen Monitors

HYUNDAI IT touch screen monitors combine the conventional output function with a touch controlled input function. This bi-directional interface makes the screens the easiest solution for interactive information flow and controlling of systems. Due to their solid design the monitors are resistant to moisture and dust and thus ensuring a long lifetime even if they are used for applications with a high operational demand like public information kiosk systems.

3D Displays

Opening access to another dimension HYUNDAI IT's 3D displays provide a new experience in virtual reality. In combination with professional computer added engineering software, 3D models can be presented more plastically and thus closer to reality. Also for the post production of 3D movies and pictures as well as for PC gaming the new 3D monitors will be the first choice. Beside 3D operations the displays can be used as conventional monitor dealing with 2D contents without restrictions.

OUTDOOR MEDIA TYPE

Enhanced Outdoor Displays for Digital Signage

The market for outdoor digital signage is growing worldwide. Providing different advantages compared to conventional outdoor advertising media, digital signage will be an interesting media for advertisers, outdoor media companies, cities and universities in the near future. Its high flexibility and the possibility of just-in-time content changes makes digital signage the perfect media for reaching target groups in a society which becomes more and more mobile.

HYUNDAI IT's outdoor displays are representing state-of-the-art display equipment for any outdoor environment. Meeting high industrial standards they are providing a high degree of operational reliability and high quality image, which are important preconditions for attracting successfully the attention of the audience.

All Weather Proof

Fitted with an intelligent cooling and heating system, the outdoor displays are well prepared for standing any weather conditions. Thereby, they can be used in ambient temperatures from -40°C to +50°C.

Sunlight Proof

For installations in environments with brightest lightning conditions – even bright sunlight – HYUNDAI IT provides special displays which are based on the optical bonding technique. This leads to the advantage that glare and reflection on the screens are reduced to a minimum while brightness is increased at the same time. Due to a special coating the screens are protected against UV radiation, too.

Ultra High Brightness

The displays are working with a backlight that is based on LEDs instead of conventional CCFL tubes. This combination enables an exceptional luminance of over 2500 cd/m² which ensures an operation during both the day as well as the night.

Anti-Vandal Protection

Thanks to a special tempered security glass HYUNDAI IT's outdoor displays are well protected against any vandalism attacks.

IP 55/IP 65 Confirmity

In order to ensure the highest possible reliability and to keep industrial quality standards the outdoor displays are meeting all requirements of IP 55 as a basic and those of IP65 optionally.

Model Name			H460S	H705S
Display Panel	Screen Size		46″	70″
	Active Display Area		1018 x 572 mm	1549.44 x 871.56 mm
	Resolution		1366 x 768	1920 x 1080
	Aspect Ratio		16 : 9	16 : 9
	Display Colors		16.7 Mil	16.7 Mil
	Brightness (cd/m²) /(Typ)		2500	2000
	Contrast Ratio		3,000: 1	2,500:1
	Response Time (ms, GtG)		8	8
	Viewing Angle (H°/V°)		178°/178°	178°/178°
	Life Time		30,000h Average	30,000h Average
	Backlight Type		LED	LED
Connectivity & ControL	Input	VGA	1	1
		HDMI	Option	Option
	Network Connections	Wired	Option	Option
		Wireless	Option	Option
	Power Requirement	Voltage	100 ~ 240 vac	100 ~ 240 vac
		Consumption	0.53 KW with heating: max. 2.0 KW	1.2 KW with heating: max. 6 KW
	Auto Cooling System		Yes	Yes
	Tempered Glass		Yes	Yes
Mechanical	Set (W X H X L)		27.1″ X 58.8″ X 8.2″	41.3″ x 86.6″ x 12″
	Tempered Glass Thickness		0.45″	0.45″
	Weight With Glass		174.16 lbs.	330.68 lbs.
	Surface Treatment Visible Surfaces		Powder Coated, Powder Salty	Powder Coated, Powder Salty
Environmental Conditions	Temperature Operational (°C)		-40/50 (min/max)	-40/50 (min/max)
	Temperature Storage (°C)		-20/60 (min/max)	-20/60 (min/max)
	Humidity (Non-Cond.) (%)		10 ~ 90	10 ~ 90
Regulations	EMI/EMC, Safety		En55022 Class A, En55024, En61000-3-2, En61000-3-3, En50121-4, En60950-1, CE, EN60529 IP55	

Technical details are subject of changes without further notice. Errors expected.

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METAL FRAME TYPE

Fields of Operation

According to the sophisticated product design, the HYUNDAI IT Digital Signage meet all necessary pre-conditions to be used for the different kind of digital signage systems, such as:

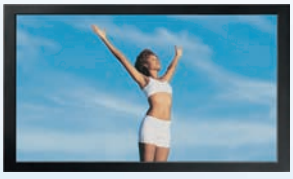
- **Information:** e.g. traffic information at the airport
- **Advertising:** e.g. in-store promotion in retail establishment
- **Sales support:** e.g. last minute offers in travel agencies
- **Brand building:** e.g. brand communication during exhibition & events
- **Convenience:** e.g. digital signage in restau rant waiting areas
- **Presentation:** e.g. conferencing & meeting environments

Special Out-Of-Home LCD Panel

By using commercial grade LCD panels for Out-Of-Home applications the HYUNDAI IT Digital Signage have a higher brightness and contrast than standard LCD TV panels. Our LCD panel enable to operate for working time and deliver clear and bright image contents in the portrait or landscape format without any losses of quality.

High Luminance & Contrast

Achieving a luminance of up to 700 cd/m² and working with a smart dynamic contrast technology, the special Out-Of-Home panels ensure bright and sharp pictures with a facsimile depth, even in bright enlightened environments.



Regular LCD TV Panel

HYUNDAI IT Out-Of-Home Panel

Metal Frame Housing

As the most of the HYUNDAI IT Digital Signage have a solid metal frame housing it is guaranteed that the panel is well protected especially for public area installations. In addition the metal frame gives the product a high quality and appealingly optical appearance.

Ultra-High Native Resolution

With a native resolution of 1366 x 768, HYUNDAI IT Digital Signage can display high-resolution and more data information on the LCD screen by an aspect ratio of 16:9. The native HD resolution ensures brighter and sharper images if HD graphics and videos are displayed.

HD ready

Wide Viewing Angle

The wider the panel's viewing angle is the more viewers are able to see the contents in a high quality. That matters for both meeting environments as well as public area installations. Coping with a wide viewing angle of 178° (h/v) HYUNDAI IT Digital Signage bring the content to the entire audience.

178° Wide View Angle

Fast Response Time

A fast response time of 8ms ensures the displaying of a clear image quality without ghosting effects for any fa st moving video or image contents.

High Connectivity

Providing an array of various professional input and output connectors [HDMI, DVI, Component/Composite (BNC), VGA] HYUNDAI IT Digital Signage afford an easy, flexible and multiple connection to a full range of external A/V devices.

Heat Control & Auto Cooling System

In order to avoid any image corruption or downtime by overheating HYUNDAI IT Digital Signage are equipped with an innovative built-in fan & heat control system, which makes the displays ready for the operation in any climatic environment.

RS-232C Interface

For an easy set-up and maintenance the built-in RS-232C port allows the remote controlling and configuration of the display's functions.

Wall Mounting

Support Wall-Mounting holes in the rear cabinet to ensure the compatibility and thus an easy installation with universal wall-mounting brackets.

Environment-Friendly

Being compliant with the European RoHS directive and working with low power consumption during operation and power saving mode (< 1W) the HYUNDAI IT Digital Signage.

RoHS COMPLIANT 2002/95/EC

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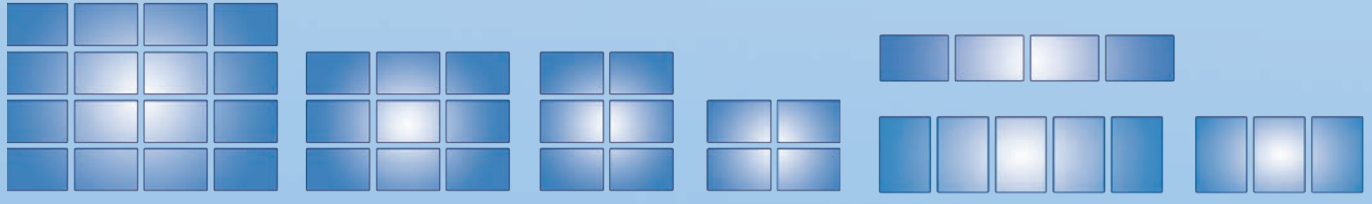
SPECIAL FEATURES

Built-In Video Wall Function

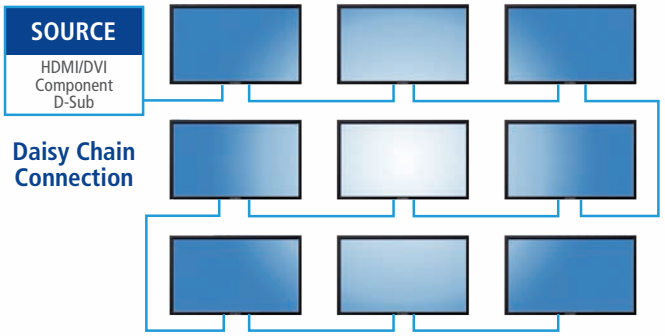
Due to the built-in multi display wall function the HYUNDAI IT Public Displays are well prepared for installing video wall configurations including up to 5 by 5 single units. For this reason no additional expensive equipment like video split processors is necessary.

Samples of Multi Display Wall Configurations



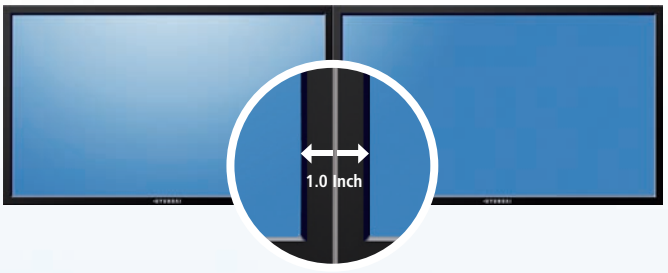
Daisy Chain Connection

In order to realize a multi display wall, the single units are linked by a Daisy Chain connection over HDMI, Component or the D-Sub interface. That implicates the advantage that just one display (master unit) needs a direct connection to the video source. The configuration of each display, regarding an individual ID and its position in the wall matrix, can be easily set-up over the on-screen menu or the RS232C interface. With all its advantages the built-in type multi display wall function allows a flexible configuration and an easy installation.



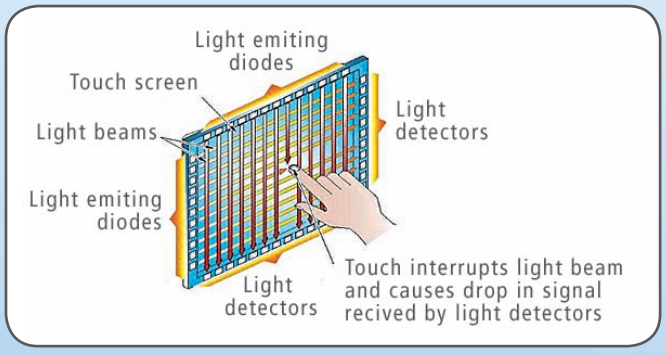
Ultra Slim Bezel Design

Coping with an ultra slim bezel design the HYUNDAI IT Public Displays are predestined for the operation in video wall configurations. Combined with the cutting edge function – which allows displaying the full picture content – the smart design of the HYUNDAI Public Displays ensure a maximum screen area with unified images and a minimum of viewable interruptions.



Touch Screen Function (Option)

As an option all HYUNDAI IT Public Displays can be equipped with touch screen functionality. According to screen size and the kind of application, two different touch screen technologies are used: either the infrared ray matrix or infrared ray sensor technology. That makes the HYUNDAI Public Displays's an reliable touch screen for interactive applications.



Type	Infrared (Matrix)
Application	Graphics Intensive, Severe Duty, Mission Critical Applications
Light Transmission	92~100%
Response Time	16ms
Touch Accuracy	98.5~99%
Environment	Indoor/Outdoor
Operating Temp	-41°C ~ +70°C
Life	Tested to perform over 100 million touc hes on a single point
Surface Hardness	5mm with Anti-Vandal
Input Mode	Bare or gloved finger, stylus, pen etc., any object that blocks light
Function	Senses interruption of invisible infrared array. Fully ADA compliant.
Size	24" ~ 57"
Usage	Large Screen, DID

Technical details are subject of changes without further notice. Errors expected.

Tempered Security Glass (Option)

In order to protect the displays against vandal attacks and thus avoiding additional costs during the operational period it is possible to cover the screens with a tempered security glass. Combined with the opportunity of locking the keys for the on-screen menu and the solid metal frame housing the HYUNDAI Public Displays are the perfect visual equipment for the usage in high frequented public areas.

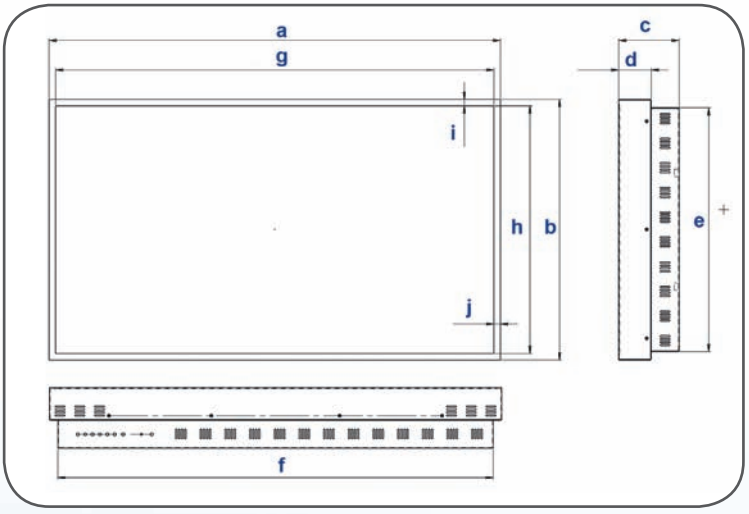
Indoor Public Displays | Technical Specification

Model		D320ML	D400ML	D420ML	D460ML	D460MLO	D525ML	D575ML	D705M
Panel	Screen Size	32″	40″	42″	46″	46″	52″	57″	70″
	Active Display Area (mm)	697.68 x 392.26	885.17 x 497.66	930.3 x 523.0	1018.35 x 572.54	1018.35 x 572.54	1152 x 648	1251.36 x 703.89	1549.4 x 871.6
	Resolution	1366 x 768	1366 x 768	1366 x 768	1366 x 768	1366 x 768	1920 x 1080	1920 x 1080	1920 x 1080
	Aspect Ratio	16:9	16:9	16:9	16:9	16:9	16:9	16:9	16:9
	Display Colors	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M
	Brightness (Typ)	450 cd/m²	700 cd/m²	500 cd/m²	700 cd/m²	700 cd/m²	600 cd/m²	600 cd/m²	600 cd/m²
	Contrast Ratio	4,000:1	2,000:1	800:1	2,000:1	2,000:1	1,700:1	2,000:1	1,500:1
	Response Time	8 ms	8 ms	5 ms	8 ms	8 ms	8 ms	8 ms	8 ms
	Viewing Angle	178º/178º	178º/178º	178º/178º	178º/178º	178º/178º	180º/180º	178º/178º	178º/178º
	Lifetime	50,000h	50,000h	50,000h	50,000h	50,000h	50,000h	50,000h	50,000h
Resolution	Monitor (Frequency H/V)	1360 x 768 (49,02kHz/60Hz)	1360 x 768 (49,02kHz/60Hz)	1360 x 768 (49,02kHz/60Hz)	1360 x 768 (49,02k Hz/60Hz)	1360 x 768 (49,02k Hz/60Hz)	1920 x 1080 (67,5kHz/60Hz)	1920 x 1080 (67,5kHz/60Hz)	1920 x 1080 (67,5kHz/60Hz)
	DTV	1080i	1080i (Multi Screen: 720p)	1080i	1080i (Multi Screen: 720p)	1080i (Multi Screen: 720p)	1080p (Multi Screen: 1080p)	1080p (Multi Screen: 1080p)	1080p (Multi Screen: 1080p)
Input	RGB (D-Sub)	1	1	1	1	1	1	1	1
	HDMI	1	1	1	1	1	1	1	1
	CVBS (BNC)	1	1	1	1	1	1	1	1
	Component (BNC)	1	1	1	1	1	1	1	1
	PC Audio	1	1	1	1	1	1	1	1
	Component Audio	1	1	1	1	1	1	1	1
	Composite Audio	1	1	1	1	1	1	1	1
Output	PC Analog (RGB, D-Sub)	1	1	1	1	1	1	1	1
	DVI (HDMI connector)	1	1	1	1	1	1	1	1
	Composite (BNC)	1	1	1	1	1	1	1	1
	Component (BNC)	1	1	1	1	1	1	1	1
	RS232C	1	1	1	1	1	1	1	1
	Speaker	1	1	1	1	1	1	1	1
Control	Multi-screen Function (Loop)	DVI, D-Sub, Component, Composite							
	OSD Language	KR / GB / DE / FR / ES / IT / PT / SE / DK / FI							
Power	Input Voltage	100~240VAC	100~240VAC	100~240VAC	100~240VAC	100~240VAC	100~240VAC	100~240VAC	100~240VAC
	Power consumption/ DPMS	130 W/1W	200 W/1W	220 W/1W	260 W/1W	310 W/1W	320 W/2W	460 W/2W	900 W/4W
Options	Tempered Glass	Option	Option	Option	Option	Yes	Option	Option	Option
	Touch Screen	D320MLI	D400MLI	D420MLI	D460MLI	-	D520MLI	D575MLI	D705MLI
	Optical Bonding (ave.)	-	-	-	-	98% light transmittance 1% reflectance	-	-	-
Other features		Auto Cooling System (1EA), Auto Power Control (On/Off Timer), Edge Correction							
Dimension	Wall Mounting Hole (WxH Inch)	15.7″ x 7.9″	15.7″ x 7.9″	22.8″ x 9.0″	22.8″ x 9.0″	22.8″ x 9.0″	22.8″ x 9.0″	27.6″ x 14.7″	14.9″ x 25.1″ (2x)
	a (Width, Inch)	30.2″	36.1″	38.8″	41.4″	41.4″	47.1″	52.5″	66.3″
	b (Height, Inch)	18.0″	20.8″	22.8″	23.8″	23.8″	27.3″	30.3″	39.6″
	c (Depth, Inch)	4.5″	4.8″	4.7″	4.8″	4.8″	5.1″	5.2″	5.8″
	d (Inch)	2.2″	2.6″	2.4″	2.6″	2.6″	2.8″	2.9″	3.4″
	e (Inch)	16.7″	19.4″	21.5″	22.4″	22.4″	27.3″	28.8″	37.5″
	f (Inch)	28.9″	34.7″	37.5″	40.0″	40.0″	45.7″	51.1″	64.1″
	g (Inch)	27.5″	35.0″	36.7″	40.0″	40.0″	45.5″	49.4″	61.3″
	h (Inch)	15.5″	19.7″	20.7″	22.7″	22.7″	25.7″	27.8″	34.6″
	i (Inch)	1.3″	0.5″	1.0″	0.5″	0.5″	0.8″	1.2″	2.5″
	j (Inch)	1.2″	0.5″	1.0″	0.5″	0.5″	0.8″	1.5″	2.5″
Weight	Set	41.88 lbs.	61.72 lbs.	70.54 lbs.	80.46 lbs.	80.46 lbs.	101.85 lbs.	171.51 lbs.	209.43 lbs.
Accessories		Power cord, Manual, HDMI Cable, Remocon							

Technical details are subject of changes without further notice. Errors expected.

Model		D320MK	B420MK	P420MN
Panel	Screen Size	32″	42″	42″
	Active Display Area (mm)	699.7 x 392.3	930.3 x 523.0	930.3 x 523.0
	Resolution	1366 x 768	1366 x 768	1366 x 768
	Aspect Ratio	16:9	16:9	16:9
	Display Colors	16.7 M	16.7 M	16.7 M
	Brightness (Typ)	450 cd/m^2	500 cd/m^2	500 cd/m^2
	Contrast Ratio	4,000:1	800:1	800:1
	Response Time	8 ms	5 ms	5 ms
	Viewing Angle	178^o/178^o	178^o/178^o	178^o/178^o
	Lifetime	50,000h	50,000h	50,000h
Resolution	Monitor (Frequency H/V)	1360 x 768 (49,02kHz/60Hz)	1360 x 768 (49,02kHz/60Hz)	1360 x 768 (49,02kHz/60Hz)
	DTV	1080i (Multi Screen: 720p)	1080i (Multi Screen: 720p)	
Input	RGB (D-Sub)	1	1	1
	HDMI	1	-	-
	Component (BNC)	1	1	-
	PC Audio	1	1	-
	Component Audio	1	1	-
	LAN	-	1	1
	USB	-	-	3
	RS232C	1	1	1
Audio Output		1	1	Built-In Speaker
Power	Input Voltage	100~240VAC	100~240VAC	100~240VAC
	Power consumption/ DPMS	220 W/2W	220 W/2W	260 W/9W
Others	Auto Cooling System	Yes (1EA)	Yes (1EA)	Yes (1EA)
	Tempered Glass	Option	Option	Option
	Touch Screeen	Option	Option	Option
	Player Type	MMP	Built-In Set-Top Box	Built-In PC
	Other features	Auto Power Control (On/Off Timer)		
Dimension	Mounting Hole	15.7″ x 7.9″	22.8″ x 9″	22.8″ x 9″
	a (Width, Inch)	30.2″	38.8″	38.8″
	b (Height, Inch)	18.0″	22.8″	22.8″
	c (Depth, Inch)	4.4″	4.7″	4.7″
	i (Inch)	1.3″	1″	1″
	j (Inch)	1.2″	1″	1″
Weight	Set	41.88 lbs.	70.54 lbs.	70.54 lbs.

TYP A: Standard Metal Frame Type



TYP B: Metal Frame with Touch Screen

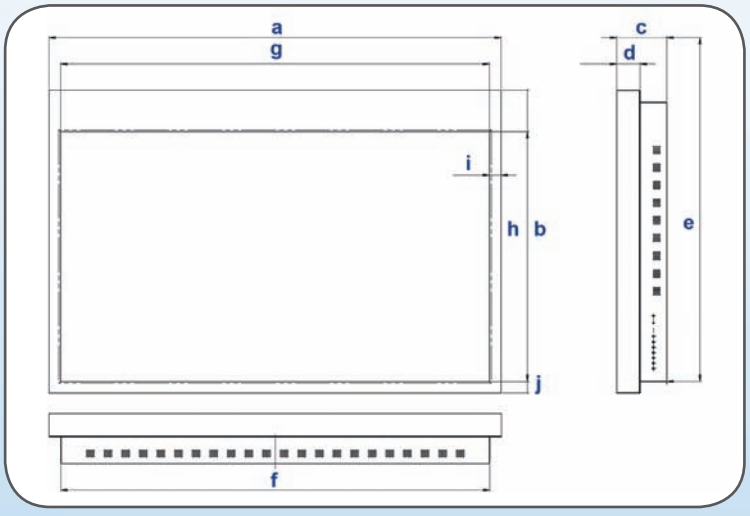


Table Stand Type A – Landscape (Option)

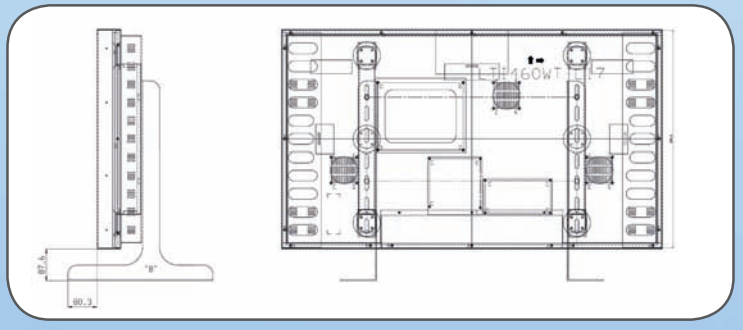
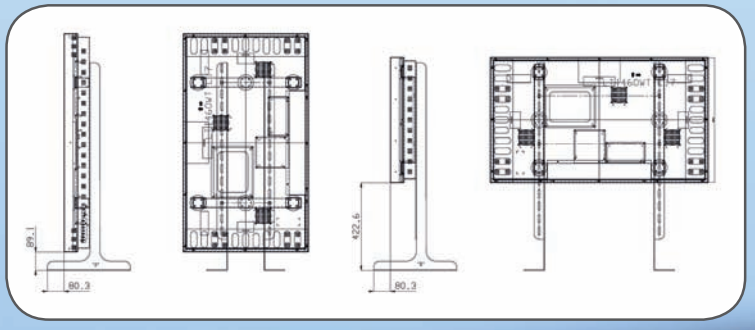


Table Stand Type B – Portrait/Landscape (Option)



STAND ALONE TYPE

Versatile Single Screen Information Signage

The HYUNDAI IT Stand-Alone Public Displays are the best solution for single screen information signage. Combining dynamic screen contents and the static depiction of your corporate identity the Stand-Alone Public Displays are bringing the maximum brand communication to the Point of Information. Exhibitions, hotel and offices lobbies, customer waiting areas and retail shops are some examples for versatile fields of operation.

Like all HYUNDAI IT Public Displays products also the Stand-Alone Type is equipped with an Out-Of-Home LCD Panel which brings the advantages of 24/7 operation, a high contrast and brightness as well as the opportunity of using the panel in portrait or landscape format.

Easy Individualization

Flexible Content Management

Providing sufficient space in the cabinet and coping with a variety of video connectors the HYUNDAI IT Stand-Alone Public Displays can be equipped with a PC or any other AV player. In combination with digital signage software and the opportunity to update the contents via LAN, WLAN or 3G the Stand-Alone Public Displays are the easiest and most cost effective way to deliver your messages to your target audience.

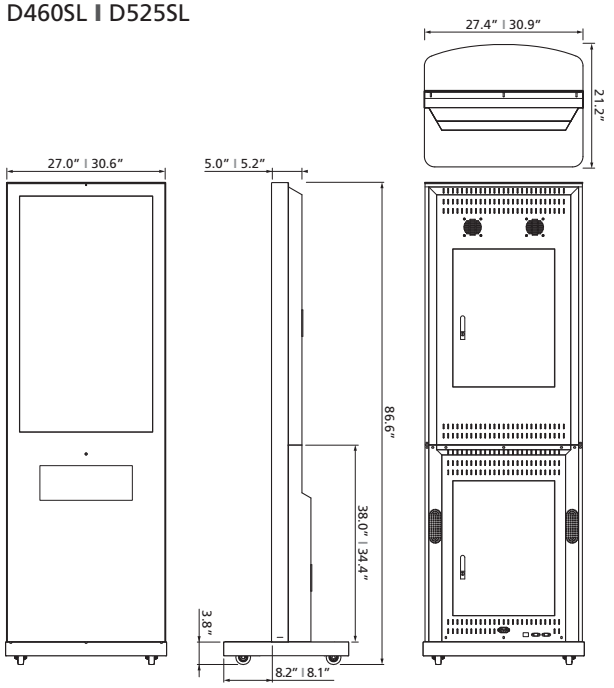
Full Protection

In order to protect the high-tech components and ensure a long life the housing is made full of steel and can be locked. The panel is protected by a special tempered glass which supports a clear image of the screen contents.

Touch Screen Function (Option)

Optional the Stand-Alone Public Displays are available as touch screen models. The used infrared touch screen technology ensures maximum controlling comfort and makes them ready for a lot of interactive applications.

D460SL I D525SL

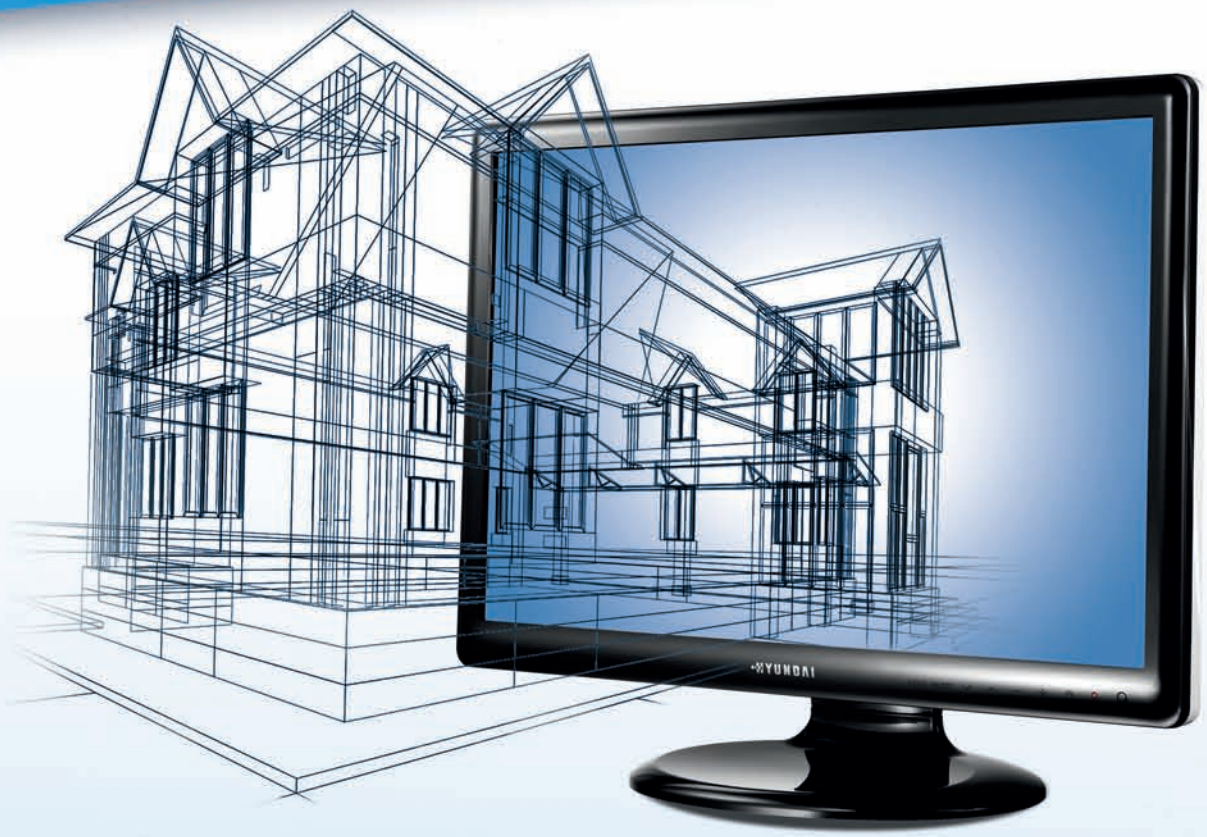


Class			D460SL	D525SL
Panel	Screen Size		46"	52"
	Active Display Area		1018.4 x 572.5	1152 x 648
	Number of Pixels		1366 x 768	1920 x 1080
	Aspect Ratio		16:9	16:9
	Display Colors		16.7 M	16.7 M
	Brightness		700 cd/m^2	600 cd/m^2
	Contrast Ratio		2000:1	1700:1
	Response Time (ms)		8	8
	View Angle (H/V)		178^O / 178^O	178^O / 178^O
	Life Time		50,000h average	50,000h average
Resolution (Max)		Monitor	1366 x 768 (47.01KHz / 60KHz)	1920 x 1080 (67.5KHz / 60KHz)
		DTV	1080i	1080p
Connectivity & Control	Input	Analog RGB	1	1
		HDMI	1	1
		Composite (BNC)	1	1
		Component (BNC)	Option	Option
		PC Audio	Option	Option
		RS232C	1	1
		Component Audio	Option	Option
		Composite Audio	Option	Option
	Out-put	Analog RGB	1	1
		HDMI	1	1
		Composite (BNC)	Option	Option
		Component (BNC)	Option	Option
		Audio	–	–
		RS232C	1	1
		Speaker (Ready)	10W x 2ch	15W x 2ch
Feature	Tempered Glass		Yes	Yes
	Auto Cooling System		Yes	Yes
	Touch Screen (Option)		IR Touch	IR Touch
OSD Language			10 Language	10 Language
Dimension	Set (WxHxL)		27.0" x 82.8" x 5.0"	30.6" x 82.8" x 5.2"
	Stand Included (WxHxL)		27.4" x 86.6" x 21.2"	30.9" x 86.6" x 21.2"
Set Weight			264.55 lbs.	TBD
Accessories			Power cord, Manual, HDMI Cable, Remocon	
Other Features			Auto Cooling System, Auto Power Control	

Technical details are subject of changes without further notice. Errors expected.

HYUNDAI

Stereoscopic 3D Displays

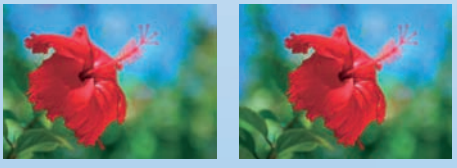


3D DISPLAYS 3D DISPLAYS

A New Dimension in Display Technology

In addition to conventional 2D operations HYUNDAI IT's stereoscopic 3D displays make it possible to watch 3D images with a breathtaking three-dimensional effect. For example 3D models created with CAD software can be displayed more plastically and thus allow a presentation close to reality. Beside professional applications the 3D displays are also suitable for multimedia operation such as 3D games, movies or pictures.

Based on the stereoscopic 3D technology the viewer is watching the 3D contents through a polarized 3D display by wearing polarized 3D glasses. A stereoscopic image presents the left and right eyes of the viewer with different perspective viewpoints, just as the viewer sees the visual world. From these two slightly different views, the eye-brain synthesizes an image of the world with stereoscopic depth.



Side by Side format image.

Recognition of left eye`s image.

Recognition of right eye`s image.

Polarized Glass

Key Features

- Moire, ghosting and flicker free
- High contrast ratio and fast response time
- HDMI with HDCP support
- Wide viewing angle
- Certified for Windows Vista

3D Visualizer/OpenGL driver (Option)

3D Visualizer enables selected third party applications to work on HYUNDAI IT's 3D displays. Using 3D displays and 3D Visualizer, 3D models appear to have a real physical depth, just like the actual objects they are modelling.

For more information on DDD's TriDef software please visite: http://www.tridef.com.

3D Software Package

HYUNDAI IT's 3D display comes along with a software package of the leading 3D software supplier DDD:

- 3D Media Player
- 3D Experience
- 3D Google Earth
- 3D games driver

DDD TriDef 3-D Experience

Recommended Hardware Requirements

Intel® Core 2 Duo or Athlon™ 64 X2 Dual-Core CPU, 1GB RAM, NVIDIA® GeForce 6600 or ATI Radeon™ X800, 100MB free disk space, Windows® XP, Vista (32Bit), DirectX 9.0c compatible sound card, Internet connection, DVD-ROM drive, Network card.

Model Name		W220S	W240S	S465D
3D Technology	Filter	Circular polarized filter	Circular polarized filter	Circular polarized filter
	Compatibility	2D/3D compatible	2D/3D compatible	2D/3D compatible
	3d Format	Horizontal interlaced	Horizontal interlaced	Horizontal interlaced
	Viewing Angle (H/V)	160°/10°	160°/10°	178°/20° (typ. CR:10)
	Supported 3d Resolution	1680 x 1050	1920 x 1200	1920 x 1080
	Conversion	2D/3D image convertible	2D/3D Image convertible	2D/3D Image convertible
	Viewing Distance (Recom.)	70 cm	70 cm	Over 1.5 m
Panel	Type	A-Si TFT Active Matrix	A-Si TFT Active Matrix | S-PVA	A-Si TFT Active Matrix
	Size: Diagonale / Display Area (H/V)	22" / 473.7 x 296.1 mm	24" / 518.4 x 324 mm	46" / 1018.4 x 572.5 mm
	Pixel Pitch (H/V)	0.282 x 0.282 mm	0.270 x 0.270 mm	0.530 x 0.530 mm
	Viewing Angle (H/V)	160° / 160° (CR:<=10)	178° / 178° (CR:<=10)	178° / 178° (CR:<=10)
	Contrast Ratio	1,000:1 / 10,000:1 (DCR)	1,000:1 / 10,000:1 (DCR)	3,000:1 / 6,000:1 (DCR)
	Response Time	5 ms (typical)	6 ms (typical)	6 ms (typical)
	Brightness	300 cd/m² (typical)	500 cd/m² (typical)	500 cd/m² (typical)
	Aspect Ratio	16:10	16:10	16:9
	Colors	16.7 M	16.7 M	16.7 M
Resolution	Maximum / Recommended	1680 x 1050 @ 60Hz	1920 x 1200 @ 60Hz	1920 x 1080 @ 60Hz
	Video	480p, 576p, 720p, 1080i/p	480p, 576p, 720p, 1080i/p	480i/p, 576i/p, 720p, 1080i/p
Input Signal	Analog RGB / DVI-D	1/1	1/1	1/-
	HDMI-HDCP / Component	1/-	1/1	1/1
	S-Video/Composite	-/-	-/-	1/1
	PC Audio	Yes	Yes	Yes
Plug-and-Play		VESA DDC 2B	VESA DDC 2B	VESA DDC 1/2B
Power Management		VESA DPMS	VESA DPMS	VESA DPMS
Power	Voltage / Consumption / Type	100-240V AC 2.0A / 45 Watt (typical) / Internal Power Supply	100-240V AC 2.0A / 85 Watt (typical) / Internal Power Supply	100-240V AC 5.0A / 230 Watt (typical) / Internal Power Supply
Safety & Regulations		cTUVus, CB, EK, PSE, FCC, CE, VCCI, Energy Star	cTUVus, CB, EK, PSE, FCC, CE, VCCI, Energy Star	cTUVus, CB, FCC, CE
Other Features	Audio System	Internal Loudspeaker 2 x 3 Watt, PC Audio In/Out		Max. 10W x 2ch
	Kensington Slot / Wallmount Holes	Yes / Yes (VESA: 100 x 100 mm)	Yes | Yes (VESA: 100 x 100 mm)	Yes | Yes (580 x 420 mm)
Stand	Type	Tiltable	Tiltable, Height adjustable (option)	Tiltable
Cabinet Color		Black/White high gloss design	Black/White high gloss design	Black
Dimensions	Unit / Packed (W X H X D)	20.5" x 16.2" x 8.3" / 24.2" x 18.9" x 7.7"	22.8" x 17.9" x 9.4" / 26.7" x 21.4" x 8.1"	45" x 33.2" x 13.7" / 50" x 38.3" x 17.8"
Weight	Unit / Packed	15.43 lbs. / 20.50 lbs.	21.82 lbs. / 30.42 lbs.	66.13 lbs. / 85.31 lbs.
Scope of Accessories		Power cable, DVI Cable, D-Sub Cable, Audio Cable, Quick Installation guide, 3D glasses, HDMI-DVI Cable(S465D only) CD-ROM: User manual, Driver, ICM profil, 3D software package		

Technical details are subject of changes without further notice. Errors expected.

HYUNDAI

Premium LCD Monitor

PREMIUM LCD MONITOR

More ergonomically designed STAND

You are able to adjust the height, pivot, tilt and swivel of the monitor to make sure for your most comfortable position.

Aspect Ratio 16:10 & 16:9

The 16:10 & 16:9 aspect ratio is designed for widescreen.
We, HyundaiIT has both of 16:9 and 16:9 aspect ratio models.

Hight Definition Multimedia Interfact

Higher resolution-Over 400% greater resolution than 720p HDTV for greater detail and lager display size. Higher refresh rates(up to 120Hz) for smoother motion, less blurring and better gaming (faster response time) Deep Color-increasing the deep color from millions to billions of color for smoother images and higher contrast ratio.

2ms Response time

Response time (milliseconds) is the time that it the pixels to turn from grey to grey or black to black.
The lower the response time, the faster the speed and the less blurring when you are watching fast moving video files or games.

Dynamic Contrast Ratio

Measure of a display system, defined as the ratio of the luminance of the brightest color (white) to that of the darkest color (black) that the system is capable of producing.

Easy functions

Built in Speaker & Automatic adjustment function.

Model Name		X260W	W240D	W242D	P220WU	K224W
Screen size		26 inch Wide	24 inch Wide	24 inch Wide	22 inch Wide	22 inch Wide
Viewing Angle (H/V)		170/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)	170/160 (CR≥10)
Response Time (ms)		3ms	2ms (GTG)	2ms (GTG)	5ms	5ms
Contrast Ratio		1000:1, 4000:1 (DCR)	1000:1, 10000:1 (DCR)	1000:1, 10000:1 (DCR)	1000:1	1000:1, 4000:1 (DCR)
Brightness		300 cd/m^2	500 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2
Active Display Size(HxV)		550.1 x 343.8 mm	518.4 x 324 mm	518.4 x 324 mm	473.8 x 296.1 mm	473.8 x 296.1 mm
Input Signal	Video	R.G.B Analog / YPbPr	R.G.B Analog	R.G.B Analog	R.G.B Analog	R.G.B Analog
		DVI/HDMI (Digital Signal)	DVI/HDMI , Component (Ypbpr)	Digital Signal	Digital Signal	Digital Signal
	Connector	15 pin D-sub / HDMI	15 pin D-sub, DVI-D / HDMI	15 pin D-sub	15 pin D-sub	15 pin D-sub
		DVI-D (HDCP)	Component (Audio L/R, Ypbpr)	DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)
		PC Audio in	PC Audio in/out	PC Audio in/out	PC Audio in	PC Audio in
Max. Resolution (Analog)		1920 x 1080 @ 60Hz	1920 x 1200 @ 60Hz	1920 x 1200 @ 60Hz	1680 x 1050 @ 60Hz	1680 x 1050 @ 75Hz
Recommended Resolution		1920 x 1080 @ 60Hz	1920 x 1200 @ 60Hz	1920 x 1200 @ 60Hz	1680 x 1050 @ 60Hz	1680 x 1050 @ 60Hz
Plug-and-Play		VESA DDC/CI	VESA DDC 2B	VESA DDC 2B	VESA DDC/CI	VESA DDC/CI
Features	VESA Wall Frame	100 x 200 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)
	Kensington lock	Yes	Yes	Yes	Yes	Yes
	Audio system	1.5W x 2ch	3W x 2ch/Earphone Jack	2W x 2ch/Earphone Jack	1W x 2ch	1W x 2ch
	USB Hub	-	USB 2.0 x 2 Ports	USB 2.0 x 2 Ports (Option)	USB 2.0 x 4 Ports	-
	Stand	Tilt Stand	Tilt, Pivot, Elevation Stand	Tilt Stand	Pivot, Elevation	Tilt Stand
Power Consumption / Type		65W (Max), Built in	85W (Typ.), Built in	55W (Max), Built in	50W (Typ.), Built in	55W (Max), Built in
Safety & Regulations		cTUVus, TUV/GS, CB, FCC, CE, VCCI, Energystar, EK, MIC, GOST, C-Tick, WEEE, TCO'03(Option)				
Dimension	Unit	23.8" x 18.7" x 9.4"	22.8" x 17.9" x 9.5"	22.8" x 17.9" x 9.5"	19.9" x 9.5" x 15.4"	20.1" x 16.6" x 8.9"
	Packed	26.5" x 20.6" x 7.6"	26.8" x 21.5" x 11.6"	25.8" x 21.2" x 9.49"	22.4" x 8.5" x 17.6"	22.4" x 18.9" x 5.1"
Weight	Unit / Packed	18.74 lbs. / 23.15 lbs.	21.83 lbs. / 29.54 lbs.	18.51 lbs. / 26.23 lbs.	14.55 lbs. / 17.42 lbs.	10.40 lbs. / 14.77 lbs.

Model Name		W220D	X224W	P90WU	K93W	X93W
Screen size		22 inch Wide	22 inch Wide	19 Inch Wide	19 inch Wide	19 inch Wide
Viewing Angle (H/V)		160/160 (CR≥10)	170/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)
Response Time (ms)		2ms (GtG)	5ms	5ms	5ms	5ms
Contrast Ratio		1000:1, 14000:1 (DCR)	1000:1, 4000:1 (DCR)	1000:1	1000:1, 4000:1 (DCR)	1000:1, 4000:1 (DCR)
Brightness		300 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2
Active Display Size(HxV)		473.7 x 296.1 mm	473.8 x 296.1 mm	408.2 x 255.1 mm	410.4 x 256.5 mm	410.4 x 256.5 mm
Input Signal	Video	R.G.B Analog	R.G.B Analog	R.G.B Analog	R.G.B Analog	R.G.B Analog
		DVI/ HDMI (Digital Signal)	Digital Signal	Digital Signal	Digital Signal	Digital Signal
	Connector	15 pin D-sub	15 pin D-sub	15 pin D-sub	15 pin D-sub	15 pin D-sub
		HDMI / DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)
		PC Audio in/out	PC Audio in	PC Audio in	PC Audio in	PC Audio in
Max. Resolution (Analog)		1680 x 1050 @ 60Hz	1680 x 1050 @ 75Hz	1440 x 900 @ 75Hz	1440 x 900 @ 75Hz	1440 x 900 @ 75Hz
Recommended Resolution		1680 x 1050 @ 60Hz	1680 x 1050 @ 60Hz	1440 x 900 @ 60Hz	1440 x 900 @ 60Hz	1440 x 900 @ 60Hz
Plug-and-Play		VESA DDC 2B	VESA DDC/CI	VESA DDC/CI	VESA DDC/CI	VESA DDC/CI
Features	VESA Wall Frame	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)
	Kensington lock	Yes	Yes	Yes	Yes	Yes
	Audio system	3W x 2ch	1W x 2ch	1W x 2ch	1W x 2ch	1W x 2ch
	USB Hub	-	-	USB 2.0 x 4 Ports	-	-
	Stand	Tilt Stand	Tilt Stand	Pivot, Elevation	Tilt Stand	Tilt Stand
Power Consumption / Type		45W (Max), Built in	55W (Max), Built in	50W (Typ.), Built in	45W (Max), Built in	45W (Max), Built in
Safety & Regulations		cTUVus, TUV/GS, CB, FCC, CE, VCCI, Energystar, EK, MIC, GOST, C-Tick, WEEE, TCO'03(Option)				
Dimension	Unit	20.6" x 16.2" x 8.3"	20.1" x 16.6" x 8.9"	17.3" x 8.1" x 15.7"	17.2" x 14.7" x 7.7"	17.2" x 14.7" x 7.7"
	Packed	24.3" x 18.9" x 7.7"	22.4" x 18.9" x 5.1"	19.2" x 6.8" x 18.2"	19.1" x 13.6" x 4.1"	19.1" x 13.6" x 4.1"
Weight	Unit / Packed	15.43 lbs. / 20.50 lbs.	10.40 lbs. / 14.77 lbs.	10.75 lbs. / 13.44 lbs.	8.81 lbs. / 11.24 lbs.	8.81 lbs. / 11.24 lbs.

Model Name		X96W (16:9)	X226W (16:9)	P90U	K93S	X93S
Screen size		18.5 inch Wide	21.5 inch Wide	19 Inch	19 inch	19 inch
Viewing Angle (H/V)		170/170 (CR≥10)	170/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)	160/160 (CR≥10)
Response Time (ms)		5ms	5ms	5ms	5ms	5ms
Contrast Ratio		1000:1, 5000:1 (DCR Typ.)	1000:1, 20000:1 (DCR Typ.)	1000:1	1000:1	1000:1
Brightness		300 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2
Active Display Size(HxV)		409.8 x 230.4 mm	476.64 x 268.11 mm	376.3 x 301.1 mm	376.3 x 301.1 mm	376.3 x 301.1 mm
Input Signal	Video	R.G.B Analog	R.G.B Analog	R.G.B Analog	R.G.B Analog	R.G.B Analog
		Digital Signal	Digital Signal	Digital Signal	Digital Signal	Digital Signal
	Connector	15 pin D-sub	15 pin D-sub	15 pin D-sub	15 pin D-sub	15 pin D-sub
		DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)	DVI-D (HDCP)
		PC Audio in	PC Audio in	PC Audio in	PC Audio in	PC Audio in
Max. Resolution (Analog)		1366 x 768 @ 60Hz	1920 x 1080 @ 60Hz	1280 x 1024 @ 75Hz	1280 x 1024 @ 75Hz	1280 x 1024 @ 75Hz
Recommended Resolution		1366 x 768 @ 60Hz	1920 x 1080 @ 60Hz	1280 x 1024 @ 60Hz	1280 x 1024 @ 60Hz	1280 x 1024 @ 60Hz
Plug-and-Play		VESA DDC/CI	VESA DDC/CI	VESA DDC/CI	VESA DDC/CI	VESA DDC/CI
Features	VESA Wall Frame	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)	100 x 100 mm (W X H)
	Kensington lock	Yes	Yes	Yes	Yes	Yes
	Audio system	1W x 2ch	1.5W x 2ch	1W x 2ch	1W x 2ch	1W x 2ch
	USB Hub	-	-	USB 2.0 x 4 Ports	-	-
	Stand	Tilt Stand	Tilt Stand	Pivot, Elevation	Tilt Stand	Tilt Stand
Power Consumption / Type		45W (Max), Built in	55W (Max), Built in	50W (Typ.), Built in	45W (Max), Built in	45W (Max), Built in
Safety & Regulations		cTUVus, TUV/GS, CB, FCC, CE, VCCI, Energystar, EK, MIC, GOST, C-Tick, WEEE, TCO'03(Option)				
Dimension	Unit	17.2" x 14.7" x 7.7"	20" x 15.2" x 7.9"	16.5" x 8" x 16.3"	15.8" x 16.6" x 8.4"	15.8" x 16.6" x 8.4"
	Packed	19.1" x 13.6" x 4.1"	21.9" x 15.1" x 4.6"	18.9" x 7.5" x 19.4"	18.1" x 16" x 4.3"	18.1" x 16" x 4.3"
Weight	Unit / Packed	8.81 lbs. / 11.24 lbs.	9.25 lbs. / 11.46 lbs.	11.24 lbs. / 14.10 lbs.	8.81 lbs. / 10.80 lbs.	8.81 lbs. / 10.80 lbs.

Touch Screen Displays

Get in Touch with a New Interface

The HYUNDAI IT LCD touch screen monitors unite the newest touch screen technology and timeless design with an optimal price-performance ratio. They can be used for applications in areas like POS, medical or monitoring & control.

Key Features

- reliable functionality thanks to 5-wire resistive touch screen technology
- robust design by hard surface (3H) and well fixing dual hinge stand
- sharp and brilliant pictures by high contrast and brightness

Model Name		G50TR	G70TR	G90TR
Touch Screen Technology	Type	5-Wire Resistive Touch Screen	5-Wire Resistive Touch Screen	5-Wire Resistive Touch Screen
	Controller Interface	RS232C or USB	RS232C or USB	RS232C or USB
	Surface Type | Hardness	Anti-Glare | 3h	Anti-Glare | 3h	Anti-Glare | 3h
	Light Transmission	>81%	>81%	>81%
	Response Time: Touch / Drawing	< 10 ms (typical) / 35 ms (max.)	< 10 ms (typical) / 35 ms (max.)	< 10 ms (typical) / 35 ms (max.)
	Touch Accuracy	98.5~99%	98.5~99%	98.5~99%
	Environment	Indoor/Outdoor, Moisture And Dust Resistant	Indoor/Outdoor, Moisture And Dust Resistant	Indoor/Outdoor, Moisture And Dust Resistant
	Operating Temperature	0°C ~ +50°C	0°C ~ +50°C	0°C ~ +50°C
	Lifetime	Tested To Perform Over 30 Million Touches On A Single Point		
	Input Mode	Bare Or Gloved Finger, Stylus, Pen Etc.	Bare Or Gloved Finger, Stylus, Pen Etc.	Bare Or Gloved Finger, Stylus, Pen Etc.
	Function	Senses Pressure Exerted On The Screen	Senses Pressure Exerted On The Screen	Senses Pressure Exerted On The Screen
Panel	Type	A-Si TFT Active Matrix / TN	A-Si TFT Active Matrix / TN	A-Si TFT Active Matrix / TN
	Diagonale | Active Display Area	15" | 304.1 x 228.1 mm	17" | 337.9 x 270.3 mm	19" | 376.3 x 301.1 mm
	Viewing Angle	140° / 110° (horizontal / vertical)	160° / 160° (horizontal / vertical)	160° / 160° (horizontal / vertical)
	Resolution	1024 x 768	1280 x 1024	1280 x 1024
	Pixel Pitch	0,297 mm (H x V)	0,264 mm (H x V)	0,294 mm (H x V)
	Contrast Ratio	700:1 (typical)	1,000:1 (typical)	1,000:1 (typical)
	Luminance	250 cd/m² (typical)	300 cd/m² (typical)	300 cd/m² (typical)
	Response Time	12ms	5ms	5ms
	Aspect Ratio	5:4	5:4	5:4
	Colors	16.2 M	16.7 M	16.7 M
Resolution	Maximal | Recommended	1024 x 768 @ 75 Hz | 1024 x 768 @ 60 Hz	1280 x 1024 @ 75 Hz | 1280 x 1024 @ 60 Hz	1280 x 1024 @ 75 Hz | 1280 x 1024 @ 60 Hz
Connectors	Analog | Digital	15-pin D-Sub | 24-pin DVI-D	15-pin D-Sub | 24-pin DVI-D	15-pin D-Sub | 24-pin DVI-D
Plug-And-Play		VESA DDC 2B	VESA DDC 1/2B (EDID 1.3)	VESA DDC 1/2B (EDID 1.3)
Power Management		VESA DPMS	VESA DPMS	VESA DPMS
Power	Voltage | Consumption | Type	100 – 240V AC 1.5A | 19 Watt | external DC 12V	100 – 240V AC 1.5A | 32 Watt | external DC 12V	100 – 240V AC 1.5A | 36 Watt | external DC 12V
Safety & Regulations		NRTL, CB, TUV-GS, FCC, CE, RoHS, WEEE, ISO 13406-2 (class 2)		
Other Features	Audio System	2 W X 2ch/Earphone Jack	2 W X 2ch/Earphone Jack	2 W X 2ch/Earphone Jack
	Kensington Slot | Wallmounting Holes	Yes | Yes (VESA: 75 x 75mm)	Yes | Yes (VESA: 75 x 75mm)	Yes | Yes (VESA: 100 x 100mm)
Stand	Type	Dual Hinge Stand	Dual Hinge Stand	Sustaining Stand
Cabinet Color		Black	Black	Black
Dimensions	Unit | Packed (W X H X D)	13.7" x 13.4" x 7.3" | 15.1" x 14.9" x 4.9"	15.0" x 15.9" x 7.9" | 17.1" x 14.9" x 5.5"	16.5" x 15.9" x 6.7" | 19.1" x 18.7" x 8.3"
Weight	Unit | Packed	6.06 lbs. | 9.70 lbs.	10.91 lbs. | 14.77 lbs.	12.78 lbs | 16.79 lbs
Scope Of Delivery		Power Cord, D-Sub Cable, DVI Cable, Audio Cable, Usb Cable, Warranty Card Cd-Rom: User Manual, Monitor Driver, Touch Screen Driver		

Technical details are subject of changes without further notice. Errors expected.

The HYUNDAI IT Story

HYUNDAI Electronics first set up a monitor division at its electronics corporation in 1984. After launching the first monochrome monitor, HYUNDAI continuously developed its product range, rapidly succeeding in expanding production to over 1 million units per year. HYUNDAI has been a leading manufacturer of TFT displays in a variety of sizes since the mid-1990s. In 2000, the monitor division parted company with the parent corporation to become what is today Hyundai IT Corp. Ltd., Korea, and associated with 3 sales offices in Europe(HYUNDAI IT Europe GmbH), USA(HYUNDAI IT Amrica Corp.) and Japan(HYUNDAI IT Japan.)

Full Product Portfolio

Being an expert for digital display solutions, HYUNDAI IT is offering a full range of products for both consumer as well as professional customers:

LCD Monitor

Monitor + TV

3D Monitor

Touch Screen Monitor

LCD TV

3D LCD TV

Indoor Public Displays

Stand-Alone Type

Outdoor Public Displays